-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *December 10, 2004*.

2. ☒ The allowed claim(s) is/are *1-8,10,11 and 13-29*.

3. ☒ The drawings filed on *10 April 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

UNITED STATES PATENT AND TRADEMARK OFFICE

P.O. Box 1450, Alexandria, Virginia 22313-1450 – www.USPTO.GOV

Examiner's Detailed Office Action

1.   Claims 9 & 12 have been canceled.

2.   Claims 1-8, 10, 11 and 23-39 are allowed.

REASONS FOR ALLOWANCE

3.   The following is an Examiner's statement for reasons for allowance:

4.   The closest prior art *Mikurak; Michael G.* (USPN 6,606,744 B1), *Peter Kubat,*

Estimation of Reliability for Communication/Computer Networks-Simulation/Analytic

Approach IEEE, 1989, *Kubota et al.* (USPN 6,351,698 B1), *Balzer* (USPN 5,327,437),

and *Weber et al.* (USPN 5,564,005) do not teach or render obvious applicant's claimed

invention. In particular, as pointed out below, the prior art lacks certain features and the

combination as specified in the respective claims.

5.   With regards to claim 1 *Mikurak; Michael G., Peter Kubat, Kubota et al., Balzer,* and

Weber et al. do not disclose ... a component to assess reliability of a communication, and a

component to infer a probability associated with en one or more intentions of the communi-

cation, and a plurality of candidate utterances are defined for each intention, the plurality of

candidate utterances are an analyzed according to o a Bayesian network model, the model is

determined over different instances of time to pral2abilisticallv infer a communicators intent.

6.   With regards to claim 17 *Mikurak; Michael G., Peter Kubat, Kubota et al., Balzer,* and

Weber et al. do not disclose … assessing reliability of a communication, and inferring a probabi-

lity associated with, one or more intentions of the communication, defining a plurality of candi-

date utterances for each intention, and analyzing the plurality of candidate utterances according

to a Bayesian network model, the model is determined over different instances of time to proba-

bilistically infer communicators intent.

7.   With regards to claim 22 *Mikurak; Michael G., Peter Kubat, Kubota et al., Balzer,* and

Weber et al. do not disclose … gestures and other modalities related to an one or more under-

lying communicative intentions the component defining a plurality of candidate utterances for

each intention, analyzing the plurality of candidate utterances according to Bayesian network

model, the model is determined over different instances of time to probabilistically infer a

communicators intent, and the component concurrently employing at least two of the commu-

nications in determining an action to facilitate achieving the intention; and a second component

to perform the action if the underlying communicative intention is above a confidence threshold.

8.   With regards to claim 23 *Mikurak; Michael G., Peter Kubat, Kubota et al., Balzer,* and

Weber et al. do not disclose … inferring a probability that a user desires a service, performing

a cost-benefit analysis to determine whether a dialog with the user is above a predetermined

expected utility, and engaging a user with a question about the desires of the service according

to the expected utility.

9.   With regards to claim 28 *Mikurak; Michael G., Peter Kubat, Kubota et al., Balzer,* and

Weber et al. do not disclose ... inferring a probability that a user desires a service for performing

a cost-benefit analysis to determine whether a dialog with the user is above a predetermined

expected utility, and engaging a user with a question about the desires of the service according to

the expected utility.

Correspondence Information

10.   Any inquires concerning this communication or earlier communications from the

examiner should be directed to Michael B. Holmes, who may be reached Monday through

Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile

transmission (571) 273-3686 or email Michael.holmesb@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (703) 746-7239.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, Anthony

Knight, may be reached at (571) 272-3687.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service

Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor

of the south side of the Randolph Building.

Anthony Knight
Supervisory Patent Examiner
Group 3600

Michael B. Holmes
Patent Examiner
Artificial Intelligence
Art Unit 2121
United States Department of Commerce
Patent & Trademark Office

Monday, February 28, 2005

MBH